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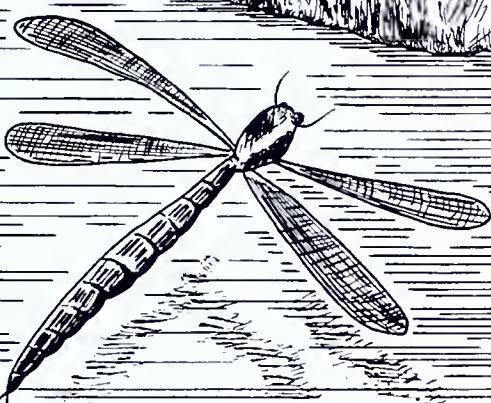
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PENNSYLVANIA GEOLOGICAL PUBLICATIONS

Compiled by Caron O'Neil and Anne B. Lutz
Pennsylvania Geological Survey

COVER: A typical scene of a Pennsylvanian-age coal swamp. Such swamps were common throughout much of Pennsylvania about 300 million years ago. Vegetation accumulated, was buried, and later was converted to the bituminous and anthracite coalbeds mined in Pennsylvania today. The ancestral dragonfly in the foreground had a wingspread of about 2 feet. Drafted by John G. Kuchinski.

PENNSYLVANIA GEOLOGICAL SURVEY

FOURTH SERIES

HARRISBURG

1996

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HOW TO ORDER PUBLICATIONS

Unless otherwise noted, **free publications, open-file reports, or reports marked by a double dagger (‡)** may be obtained from:

Department of Conservation and Natural Resources
Bureau of Topographic and Geologic Survey
P. O. Box 8453
Harrisburg, PA 17105-8453
717-787-2169

Other publications may be purchased over the counter (OC) or by mail (M) from:

Department of General Services
State Book Store
1825 Stanley Drive
Harrisburg, PA 17103-1257
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Add **6 percent state sales tax** to the price of all publications purchased over the counter or mailed to a Pennsylvania address, except those marked by ‡. Prices of publications marked by ‡ already include state sales tax. If an order is to be mailed to a foreign address, include an additional \$3.75 for postage and handling. **Optional insurance** is available for publications purchased by mail from the State Book Store; to guarantee the replacement of publications that are damaged or lost in transit, add 10 percent to the cost of each publication ordered. Make check or money order payable to **Commonwealth of Pennsylvania**. Stamps will not be accepted as payment. Order forms are included at the back of this book for your convenience.

HOW TO OBTAIN TOPOGRAPHIC MAPS OF PENNSYLVANIA

Topographic maps of Pennsylvania are prepared by the U.S. Geological Survey in cooperation with the Pennsylvania Bureau of Topographic and Geologic Survey. Persons wishing to know the names and scales of topographic maps that are available for Pennsylvania should refer to **Pennsylvania—Index to Topographic and Other Map Coverage**. Names, dates, and prices of maps currently available are listed in **Catalog of Topographic and Other Published Maps**. Both of these publications are free upon request from either of the following agencies:

Department of Conservation and Natural Resources
Bureau of Topographic and Geologic Survey
P. O. Box 8453
Harrisburg, PA 17105-8453
717-787-2169

U.S. Geological Survey Information Services
P. O. Box 25286
or
Denver, CO 80225
303-202-4700

Topographic maps may be purchased from the U.S. Geological Survey at the address listed in the right-hand column above. Ordering information and order forms are included in **Catalog of Topographic and Other Published Maps**.

THE GEOLOGICAL SURVEYS OF PENNSYLVANIA

There have been four geological surveys of Pennsylvania and four resulting series of publications:

First Survey, 1836–1842: Publications—6 annual reports, 2 quarto-volumes, and a state geologic map.

Second Survey, 1874–1889: Publications—81 volumes, 35 atlases, and 6 grand atlases.

Third (Commission) Survey, 1899–1914: Publications—6 biennial reports and 12 economic reports, some of which are listed in this book.

Fourth Survey, 1919– : Most publications (fourth series) are listed in this book. The list does not include superseded or replaced reports that are out of print.

All reports of the first three geological surveys and some of the reports of the present (fourth) survey are out of print.

SOURCES OF OUT-OF-PRINT REPORTS

Many reports appearing in this list of publications are marked with an asterisk (*), indicating that they are out of print and no longer available for distribution. Some reports are marked with a dagger (†), indicating that they are temporarily out of print and that new editions are in preparation. Out-of-print reports are available for study in many libraries throughout the state (see list on inside front cover).

The library of the Bureau of Topographic and Geologic Survey, Second Floor, Evangelical Press Building, 1500 N. Third Street, Harrisburg, telephone 717-783-8077, is open for public use and contains most of the Pennsylvania Survey reports, as well as many of the U.S. Geological Survey and other governmental and institutional reports related to Pennsylvania.

BIBLIOGRAPHIES OF PENNSYLVANIA GEOLOGY

For a more comprehensive, annotated listing of publications dealing with Pennsylvania geology through 1979, including journal articles and nongovernmental publications, please refer to the following General Geology Reports published by the Bureau of Topographic and Geologic Survey: **G 34**, **G 42**, **G 61**, and **G 73**, listed on pages 10, 11, and 12 of this book.

For a complete listing of U.S. Geological Survey publications on the geology and water resources of Pennsylvania from 1879 to 1988, refer to **List of U.S. Geological Survey Geologic and Water-Supply Reports and Maps for Pennsylvania and New Jersey**. This publication may be purchased from U.S. Geological Survey Information Services, P. O. Box 25286, Denver, CO 80225, telephone 303-202-4700. The price is \$2.50 plus \$3.50 for shipping and handling; please make check payable to *U.S. Geological Survey*.

MAP SCALES

Common map scales referred to in the list of publications and their equivalent distances are as follows:

SCALE	EQUIVALENT DISTANCE	SCALE	EQUIVALENT DISTANCE
1:6,000	1 inch = 500 feet	1:125,000	1 inch = approx. 2 miles
1:12,000	1 inch = 1,000 feet	1:250,000	1 inch = approx. 4 miles
1:16,000	1 inch = 1,333 feet	1:500,000	1 inch = approx. 8 miles
1:24,000	1 inch = 2,000 feet	1:380,160	1 inch = 6 miles
1:48,000	1 inch = 4,000 feet	1:1,000,000	1 inch = approx. 16 miles
1:50,000	1 inch = 4,167 feet	1:2,000,000	1 inch = approx. 32 miles
1:62,500	1 inch = approx. 1 mile	1:2,500,000	1 inch = approx. 40 miles

Other map scales cited in the list are followed by their equivalent distances.

FORMAT, SYMBOLS, AND ABBREVIATIONS

The list of publications is arranged by series of reports in alphabetical order. Within each series, the reports are listed in numerical order. In the three-column format, the left column indicates the report series and number. The middle column contains bibliographic information such as the title, author(s), year of publication, number of pages, and number of plates. Also included in this column are notations of bedrock and surficial geologic maps, economic geologic maps, and other maps of particular interest, as well as the scales of the maps. The right column contains information on the printing status of each report and prices of reports that are in print. The abbreviations and symbols used in the right column are as follows:

ABBREVIATION OR SYMBOL	MEANING
*	Out of print (see "Sources of Out-of-Print Reports" at the top of this page)
†	Temporarily out of print; new edition in preparation
‡	Partial report (plates only); books are in press and will be available for purchase at a later date (see "How to Order Publications" on page 1)
OC	Over the counter (see "How to Order Publications" on page 1)
M	Mail (see "How to Order Publications" on page 1)

LIST OF PUBLICATIONS
PENNSYLVANIA GEOLOGICAL SURVEY
Fourth Series

ATLAS SERIES

(Map scale 1:24,000 unless otherwise indicated.)

A 5	New Castle quadrangle—Geology and mineral resources (Bessemer, New Castle South, New Galilee, and Beaver Falls 7.5-minute quadrangles, Lawrence and Beaver Counties), F. W. DeWolf. 1929. 238 p., 18 pls., bedrock geol. map, surficial geol. map, econ. geol. map, scale 1:62,500.....	*
A 27	Geology and mineral resources of the Pittsburgh quadrangle, Pennsylvania (Pittsburgh East, Braddock, Glassport, and McKeesport 7.5-minute quadrangles, Allegheny and Westmoreland Counties), M. E. Johnson. 1929; 3rd printing, 1974. 236 p., 33 pls., geol. map, min. resource map, scale 1:62,500.....	*
A 33a	Geology and mineral resources of the Oil City quadrangle, Venango County, Pennsylvania , A. N. Ward, Jr., M. T. Lukert, and W. F. Chapman. 1979. Geol. map and text on 1 pl.	5.90 (OC) 7.15 (M)
A 36	Freeport quadrangle—Geology and mineral resources (Freeport, Leechburg, New Kensington East, and Vandergrift 7.5-minute quadrangles, Armstrong, Westmoreland, Allegheny, and Butler Counties), H. H. Hughes. 1933. 272 p., 9 pls., geol. map, scale 1:62,500.....	2.00 (OC) 3.25 (M)
A 37	Mineral resources of the Greensburg quadrangle, Westmoreland County, Pennsylvania (Murrysville, Slickville, Irwin, and Greensburg 7.5-minute quadrangles), M. E. Johnson. 1925; 3rd printing, 1974. 162 p., 13 pls., geol. map, econ. geol. map, scale 1:62,500.....	*
A 48	Geology and mineral resources of the Donegal quadrangle, Pennsylvania (Mammoth, Stahlstown, Donegal, and Seven Springs 7.5-minute quadrangles, Westmoreland, Fayette, and Somerset Counties), M. N. Shaffner. 1963. 116 p., 4 pls., geol. map, coal reserve maps, scale 1:62,500	3.70 (OC) 4.95 (M)
A 54	Geology and mineral resources of the Brookville quadrangle, Pennsylvania (Corsica, Brookville, Summerville, and Coolspring 7.5-minute quadrangles, Jefferson and Clarion Counties), C. K. Graeber and R. M. Foose. 1942; 3rd printing, 1974. 136 p., 16 pls., geol. map, min. resource map, scale 1:62,500	8.05 (OC) 9.30 (M)
A 55	Geology and mineral resources of the Smicksburg quadrangle, Pennsylvania (Dayton, Valier, Plumville, and Marion Center 7.5-minute quadrangles, Jefferson, Indiana, and Armstrong Counties), M. N. Shaffner. 1946; 2nd printing, 1969. 252 p., 11 pls., geol. map, min. resource map, scale 1:62,500	10.10 (OC) 11.35 (M)
A 57	Geology and mineral resources of the New Florence quadrangle, Pennsylvania (Bolivar, New Florence, Wilpen, and Rachelwood 7.5-minute quadrangles, Indiana, Westmoreland, Cambria, and Somerset Counties), M. N. Shaffner. 1958. 165 p., 13 pls., geol. and min. resource map, scale 1:62,500; coal reserve maps, scale approx. 1:84,000 (1 in. = approx. 1.3 mi)	5.50 (OC) 7.45 (M)
A 64	Geology and mineral resources of the Hazen, Falls Creek, Reynoldsville, and DuBois quadrangles, Clearfield and Jefferson Counties, Pennsylvania , A. D. Glover and W. A. Bragonier. 1978. 131 p., 16 pls., geol. map, scale 1:24,000; coal resource maps, scale 1:48,000.....	24.80 (OC) 27.05 (M)
A 65	Geology and mineral resources of the Punxsutawney quadrangle, Pennsylvania (Punxsutawney, McGees Mills, Rochester Mills, and Burnside 7.5-minute quadrangles, Jefferson, Indiana, and Clearfield Counties), G. H. Ashley. 1926; 2nd printing, 1969. 145 p., 6 pls., geol. map, min. resource map, scale 1:62,500.....	8.05 (OC) 9.25 (M)

A 74ab	Geology and mineral resources of the Sabula and Penfield quadrangles, Clearfield, Elk, and Jefferson Counties, Pennsylvania , T. M. Berg and A. D. Glover. 1976. 98 p., 10 pls., geol. map, scale 1:24,000; coal reserve map, foundation and excavation map, scale 1:48,000	21.60 (OC) 23.85 (M)
A 74cd	Geology and mineral resources of the southern half of the Penfield 15-minute quadrangle, Pennsylvania (Luthersburg and Elliott Park 7.5-minute quadrangles, Clearfield County), W. E. Edmunds and T. M. Berg. 1971; 2nd printing, 1973. 184 p., 22 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	9.90 (OC) 12.15 (M)
A 75	Geology and mineral resources of the Curwensville quadrangle (Mahaffey, Curwensville, Westover, and Irvona 7.5-minute quadrangles, Clearfield County), G. H. Ashley. 1940; 3rd printing, 1974. 140 p., 4 pls., geol. map, min. resource map, scale 1:62,500	6.90 (OC) 8.25 (M)
A 84cd	Geology and mineral resources of the southern half of the Clearfield 15-minute quadrangle, Pennsylvania (Clearfield and Lecontes Mills 7.5-minute quadrangles, Clearfield County), A. D. Glover. 1970; 2nd printing, 1973. 139 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	8.50 (OC) 10.75 (M)
A 85ab	Geology and mineral resources of the northern half of the Houtzdale 15-minute quadrangle, Pennsylvania (Glen Richey and Wallacetown 7.5-minute quadrangles, Clearfield County), W. E. Edmunds. 1968; 2nd printing, 1973. 150 p., 15 pls., geol. map, scale 1:24,000; coal reserve maps, scale 1:48,000	7.60 (OC) 9.85 (M)
A 85cd	Geology and mineral resources of the Ramey and Houtzdale quadrangles, Clearfield and Centre Counties, Pennsylvania , G. B. Glass, W. E. Edmunds, V. C. Shepps, and others. 1977. 94 p., 10 pls., geol. map, scale 1:24,000; coal resource maps, foundation and excavation map, scale 1:48,000	21.30 (OC) 23.55 (M)
A 86	Geology and mineral resources of the Blandburg, Tipton, Altoona, and Bellwood quadrangles, Blair, Cambria, Clearfield, and Centre Counties, Pennsylvania , R. T. Faill, A. D. Glover, and J. H. Way. 1989. 209 p., 10 pls., bedrock geol. map, scale 1:24,000; surficial geol. map, coal resource maps, scale 1:48,000.....	33.00 (OC) 35.25 (M)
A 95a	Geology and mineral resources of the Philipsburg 7½-minute quadrangle, Centre and Clearfield Counties, Pennsylvania , G. B. Glass. 1972. 241 p., 20 pls., geol. map, scale 1:24,000; coal reserve maps, foundation and excavation map, scale 1:48,000	11.60 (OC) 13.85 (M)
A 96	Tyrone quadrangle—Geology and mineral resources (Tyrone, Franklinville, Spruce Creek, and Alexandria 7.5-minute quadrangles, Blair, Huntingdon, and Centre Counties), Charles Butts, F. M. Swartz, and Bradford Willard. 1939. 118 p., 14 pls., geol. map, scale 1:62,500	*
A 109a	Bedrock and surficial geology of the McConnellsburg quadrangle, Pennsylvania (Fulton and Franklin Counties), K. L. Pierce. 1966; 2nd printing, 1974. 111 p., 3 pls., bedrock geol. map, surficial geol. map	4.80 (OC) 6.75 (M)
A 119ab	Geology and mineral resources of northeastern Franklin County, Pennsylvania , S. I. Root. 1971; 3rd printing, 1992. 104 p., 2 pls., geol. map.....	13.30 (OC) 14.60 (M)
A 119cd	Geology and mineral resources of southeastern Franklin County, Pennsylvania , S. I. Root. 1968. 118 p., 2 pls., geol. map.....	3.80 (OC) 4.45 (M)
A 124a	Geology and mineral resources of the Lock Haven quadrangle, Clinton and Lycoming Counties, Pennsylvania , A. R. Taylor. 1977. Geol. map and text on 1 pl.	6.40 (OC) 7.05 (M)
A 126	Geology and mineral resources of the Mifflintown quadrangle, Pennsylvania (Alfarata, McClure, Mifflintown, and Mexico 7.5-minute quadrangles, Juniata,	

	Mifflin, and Snyder Counties), R. R. Conlin and D. M. Hoskins. 1962. 46 p., 2 pls., geol. map.....	5.50 (OC) 6.15 (M)
A 127	Geology and mineral resources of the Loysville quadrangle, Pennsylvania (Spruce Hill, Ickesburg, Andersonburg, and Landisburg 7.5-minute quadrangles, Perry, Juniata, and Cumberland Counties), J. T. Miller. 1961. 47 p., 2 pls., geol. map	10.20 (OC) 12.05 (M)
A 129a	Geology of the Caledonia Park quadrangle area, South Mountain, Pennsylvania (Adams, Cumberland, and Franklin Counties), J. L. Fauth. 1968; 2nd printing, 1992. 133 p., 7 pls., geol. map.....	18.55 (OC) 19.85 (M)
A 129c	Geology and mineral resources of the Iron Springs area, Adams and Franklin Counties, Pennsylvania , J. L. Fauth. 1978. 72 p., 1 pl., geol. map....	8.05 (OC) 9.70 (M)
A 133cd	Geology and mineral resources of the Salladasburg and Cogan Station quadrangles, Lycoming County, Pennsylvania , R. T. Faill, R. B. Wells, and W. D. Sevon. 1977. 44 p., 2 pls., bedrock geol. map, surficial geol. map.....	12.90 (OC) 14.75 (M)
A 134ab	Geology and mineral resources of the Linden and Williamsport quadrangles, Lycoming County, Pennsylvania , R. T. Faill, R. B. Wells, and W. D. Sevon. 1977. 66 p., 2 pls., bedrock geol. map, surficial geol. map.....	15.20 (OC) 17.05 (M)
A 136	Geology and mineral resources of the Millerstown quadrangle, Perry, Juniata, and Snyder Counties, Pennsylvania (Beaver Springs, Richfield, Millerstown, and Reward 7.5-minute quadrangles), R. T. Faill and R. B. Wells. 1974. 276 p., 6 pls., geol. map, scale 1:24,000; tectonic and environ. geol. map, scale 1:48,000	26.45 (OC) 28.00 (M)
A 137ab	Geology and mineral resources of the northern half of the New Bloomfield quadrangle (Newport and Duncannon 7.5-minute quadrangles, Perry County), J. L. Dyson. 1963. 63 p., 1 pl., geol. map.....	2.90 (OC) 4.45 (M)
A 137cd	Geology and mineral resources of the southern half of the New Bloomfield quadrangle, Pennsylvania (Shermans Dale and Wertsville 7.5-minute quadrangles, Perry and Cumberland Counties), J. L. Dyson. 1967; 2nd printing, 1974. 86 p., 1 pl., geol. map	4.95 (OC) 6.85 (M)
A 138ab	Geology and mineral resources of the Carlisle and Mechanicsburg quadrangles, Cumberland County, Pennsylvania , S. I. Root. 1978. Geol. map and text on 1 pl.	7.80 (OC) 9.25 (M)
A 143cd	Geology and mineral resources of the Montoursville North and Huntersville quadrangles, Lycoming County, Pennsylvania , R. B. Wells and M. F. Bucek. 1980. 68 p., 2 pls., bedrock geol. map, surficial geol. map.....	15.10 (OC) 16.85 (M)
A 144ab	Geology and mineral resources of the Montoursville South and Muncy quadrangles and part of the Hughesville quadrangle, Lycoming, Northumberland, and Montour Counties, Pennsylvania , R. T. Faill. 1979. 114 p., 2 pls., bedrock geol. map, surficial geol. map	16.20 (OC) 18.15 (M)
A 144cd	Bedrock and surficial geologic maps and mineral production map of the Allenwood and Milton quadrangles, Union and Northumberland Counties, Pennsylvania , J. D. Inners. 1993. 3 pls., bedrock geol. map, surficial geol. map, scale 1:24,000; min. production map, scale 1:48,000	15.10‡
A 146	Geology and mineral resources of the Millersburg 15-minute quadrangle, Dauphin, Juniata, Northumberland, Perry, and Snyder Counties, Pennsylvania (Dalmatia, Pillow, Millersburg, and Elizabethville 7.5-minute quadrangles), D. M. Hoskins. 1976. 38 p., 2 pls., geol. map	14.70 (OC) 16.45 (M)
A 148ab	Geology and mineral resources of the Harrisburg West area, Cumberland and York Counties, Pennsylvania , S. I. Root. 1977. 106 p., 1 pl., geol. map ..	11.10 (OC) 12.95 (M)
A 154cd	Geology and mineral resources of the Washingtonville and Millville quadrangles, Montour, Columbia, and Northumberland Counties, Pennsylvania , J. H. Way. 1993. 51 p., 2 pls., bedrock geol. map, surficial geol. map	14.80 (OC) 16.10 (M)

A 157d	Geology, mineral resources and environmental geology of the Palmyra quadrangle, Lebanon and Dauphin Counties , A. R. Geyer. 1970. 46 p., 1 pl., geol. map	3.30 (OC) 4.45 (M)
A 164cd	Geology and mineral resources of the Bloomsburg and Mifflinville quadrangles and part of the Catawissa quadrangle, Columbia County, Pennsylvania , J. D. Inners. 1981. 152 p., 2 pls., bedrock geol. map, surficial geol. map	16.30 (OC) 18.35 (M)
A 167c	Geology of the Lebanon quadrangle (Lebanon County), A. R. Geyer, Carlyle Gray, D. B. McLaughlin, and J. R. Moseley. 1958. 1 pl., geol. map with text on reverse	2.20 (OC) 3.45 (M)
A 167d	Geology of the Richland quadrangle (Lebanon and Lancaster Counties), Carlyle Gray, A. R. Geyer, and D. B. McLaughlin. 1958. 1 pl., geol. map with text on reverse	2.20 (OC) 3.35 (M)
A 168	Lancaster quadrangle—Geology and mineral resources (Manheim, Lititz, Columbia East, and Lancaster 7.5-minute quadrangles, Lancaster and Lebanon Counties), A. I. Jonas and G. W. Stose. 1930. 106 p., 23 pls., geol. map, scale 1:62,500.....*	
A 174c	Geology and mineral resources of the Berwick quadrangle, Luzerne and Columbia Counties, Pennsylvania , J. D. Inners. 1978. 34 p., 2 pls., bedrock geol. map, surficial geol. map	13.80 (OC) 15.55 (M)
A 177c	Geology and mineral resources of the Womelsdorf quadrangle (Lancaster, Lebanon, and Berks Counties), A. R. Geyer, T. V. Buckwalter, D. B. McLaughlin, and Carlyle Gray. 1963. 96 p., 1 pl., geol. map	3.30 (OC) 5.05 (M)
A 177d	Geology and mineral resources of the Sinking Spring quadrangle, Berks and Lancaster Counties, Pennsylvania , D. B. MacLachlan, T. V. Buckwalter, and D. B. McLaughlin. 1975. 228 p., 3 pls., geol. map, scale 1:24,000; tectonic map, scale approx. 1:62,500	20.10 (OC) 21.65 (M)
A 178	Geology and mineral resources of the New Holland quadrangle, Pennsylvania (Ephrata, Terre Hill, Leola, and New Holland 7.5-minute quadrangles, Lancaster County), A. I. Jonas and G. W. Stose. 1926; 2nd printing, 1969. 40 p., 7 pls., geol. map, scale 1:62,500.....	4.00 (OC) 5.25 (M)
A 187ab	Geology and mineral resources of the Temple and Fleetwood quadrangles, Berks County, Pennsylvania , D. B. MacLachlan. 1979. 71 p., 2 pls., geol. map, scale 1:24,000; environ. geol. map, tectonic map, scale 1:48,000.....	14.10 (OC) 15.85 (M)
A 187cd	Geology and mineral resources of the Reading and Birdsboro quadrangles, Berks County, Pennsylvania , D. B. MacLachlan. 1983; revised, 1992. Geol. map and text on 1 pl.	9.70 (OC) 11.15 (M)
A 194cd	Geology and mineral resources of the Hickory Run and Blakeslee quadrangles, Carbon and Monroe Counties, Pennsylvania , W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map	10.50 (OC) 12.05 (M)
A 195ab	Geology and mineral resources of the Christmans and Pohopoco Mountain quadrangles, Carbon and Monroe Counties, Pennsylvania , W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map ...	12.90 (OC) 14.45 (M)
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A 204ab	Geology and mineral resources of the Tobyhanna and Buck Hill Falls quadrangles, Monroe County, Pennsylvania , W. D. Sevon. 1975. 2 pls., bedrock geol. map with text on reverse, surficial geol. map	11.60 (OC) 13.15 (M)
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A 214a	Geology and mineral resources of the Skytop quadrangle, Monroe and Pike Counties, Pennsylvania , W. D. Sevon and T. M. Berg. 1978. 33 p., 1 pl., geol. map	7.50 (OC) 8.95 (M)
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COUNTY REPORTS

(Map scale 1:62,500 unless otherwise indicated. County reports are numbered alphabetically within the Commonwealth.)

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C 1, Pt. 2	Mineral resources of Adams County, Pennsylvania , G. W. Stose. 1925. 64 p., 11 pls.	*
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MAPS

(Maps 16–19, 21–26, 28–37, 40, 46–47, 50–58, and 60 are out of print and have been replaced by a new series of 7.5-minute oil and gas base maps (1:24,000 scale). For ordering and price information, please contact A. H. Mathias and Company, Inc., 950 Penn Avenue, Pittsburgh, PA 15222, telephone 412–281–1800. When ordering the maps, please provide the 7.5-minute topographic map name of each map desired. An index to the available maps may be obtained by contacting the Bureau of Topographic and Geologic Survey, Subsurface Geology Section, 400 Waterfront Drive, Pittsburgh, PA 15222–4745, telephone 412–442–4235, between 8:00 a.m. and 4:00 p.m. weekdays.)

# 1	Geologic map of Pennsylvania , compiled by T. M. Berg, W. E. Edmunds, A. R. Geyer, and others. 2nd ed., 1980. Scale 1:250,000 (Map covers two 42" x 58" sheets; a third sheet, 42" x 29", contains geol. cross sections. Available folded or unfolded; folded copy will be sent unless unfolded copy is specifically requested.)....	10.35 (OC) 12.50 (M)
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# 6	Farm line map of Warren quadrangle, showing undrilled areas , S. H. Cathcart and W. H. Seifert. 1947. Scale 1:31,680 (1 in. = 2,640 ft)	*
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M 96	Coal resources of Cambria and Blair Counties, Pennsylvania—Part 1, Coal crop lines, mined-out areas, and structure contours , compiled by A. D. Glover. 1990. 129 p. (loose-leaf, 8½" x 11"), 125 maps, scale approx. 1:62,500	13.65 (OC) 15.50 (M)
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SB 7	Oil and gas field atlas of the Butler quadrangle, Pennsylvania , compiled by W. S. Lytle and L. A. Heeren. 1955. Unpaged appendix, 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)....	1.40 (OC) 3.00 (M)
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SB 9	Oil and gas field atlas of the Foxburg quadrangle, Pennsylvania , compiled by J. M. Bergsten and L. A. Heeren. 1961. 26 p., 4 pls., 10 maps (includes 1 geol. structure map, scale approx. 1:62,500)....	3.45 (OC) 5.05 (M)

SB 10	Stratigraphic studies of the Silurian rocks of Pennsylvania—Part 1, Stratigraphic cross sections of Lower Devonian and Silurian rocks in western Pennsylvania and adjacent areas , A. S. Cate. 1961. 3 p., 5 pls.	2.10 (OC) 3.35 (M)
SB 11	Stratigraphic studies of the Silurian rocks of Pennsylvania—Part 2, Sub-surface maps of the Silurian rocks of western Pennsylvania and adjacent areas , A. S. Cate. 1965. 8 p., 9 pls., isopach maps, geol. structure maps, scale 1:1,000,000.....	2.40 (OC) 4.00 (M)

WATER RESOURCE REPORTS

W 1	Ground water in southwestern Pennsylvania , A. M. Piper. 1933. 406 p., 1 pl., geol. map, scale 1:380,160	*
W 2	Ground water in southeastern Pennsylvania , G. M. Hall. 1934; 3rd printing, 1973. 255 p., 7 pls., geol. map, scale 1:380,160	*
W 3	Ground water in northwestern Pennsylvania , R. M. Leggette. 1936; 2nd printing, 1957. 215 p., 9 pls., geol. map, scale 1:380,160	3.70 (OC) 4.85 (M)
W 4	Ground water in northeastern Pennsylvania , S. W. Lohman. 1937; 2nd printing, 1957. 312 p., 7 pls., geol. map, scale 1:380,160.....	*
W 5	Ground water in south-central Pennsylvania , S. W. Lohman. 1938; 3rd printing, 1974. 315 p., 17 pls., geol. map, scale approx. 1:360,000 (1 in. = approx. 5.7 mi).....	*
W 6	Ground water in north-central Pennsylvania , S. W. Lohman. 1939; 3rd printing, 1973. 219 p., 11 pls., geol. map, scale 1:380,160.....	*
W 7	Ground-water resources of Pennsylvania , S. W. Lohman. 1941. 32 p., 1 pl. .	*
W 8	Ground-water resources of the valley-fill deposits of Allegheny County, Pennsylvania , J. H. Adamson, Jr., J. B. Graham, and N. H. Klein. 1949. 181 p., 5 pls. (supplement to W 1).....	2.10 (OC) 3.60 (M)
W 9	Ground-water resources of Beaver County, Pennsylvania , D. W. Van Tuyl and N. H. Klein. 1951. 84 p., 1 pl., geol. map, scale approx. 1:62,500 (supplement to W 3)	1.70 (OC) 2.95 (M)
W 10	Ground water for air conditioning at Pittsburgh, Pennsylvania , D. W. Van Tuyl. 1951. 34 p. (supplement to W 8).....	1.00 (OC) 2.25 (M)
W 11	Ground water resources of Bucks County, Pennsylvania , D. W. Greenman. 1955. 67 p., 2 pls., geol. map, scale 1:62,500	*
W 12	Borehole geophysical methods for analyzing specific capacity of multi-aquifer wells , G. D. Bennett and E. P. Patten, Jr. 1960. 25 p. (reprinted from U.S. Geological Survey Water-Supply Paper 1536-A).....	1.00 (OC) 2.25 (M)
W 13	Ground-water resources of the Coastal Plain area of southeastern Pennsylvania , D. W. Greenman, D. R. Rima, W. N. Lockwood, and Harold Meisler. 1961. 375 p., 22 pls.	10.50 (OC) 12.10 (M)
W 14	Geology and hydrology of the Stockton Formation in southeastern Pennsylvania , D. R. Rima, Harold Meisler, and Stanley Longwill. 1962. 111 p., 4 pls., geol. map, scale 1:24,000.....	5.10 (OC) 7.05 (M)
W 15	Geology and hydrology of the Neshannock quadrangle, Mercer and Lawrence Counties, Pennsylvania , L. D. Carswell and G. D. Bennett. 1963. 90 p., 3 pls., geol. map, scale 1:24,000	*
W 16	Geology and hydrology of the Mercer quadrangle, Mercer, Lawrence, and Butler Counties, Pennsylvania , C. W. Poth. 1963; 2nd printing, 1974. 149 p., 5 pls., bedrock geol. map, scale 1:48,000; surficial geol. map, scale 1:62,500	5.70 (OC) 7.05 (M)

W 17	Methods of flow measurement in well bores , E. P. Patten, Jr., and G. D. Bennett. 1962; 2nd printing, 1974. 28 p. (reprint of U.S. Geological Survey Water-Supply Paper 1544-C)	free
W 18	Hydrogeology of the carbonate rocks of the Lebanon Valley, Pennsylvania , Harold Meisler. 1963. 81 p., 3 pls., geol. map, scale 1:24,000.....	4.10 (OC) 6.05 (M)
W 19	Application of electrical and radioactive well logging to ground-water hydrology , E. P. Patten, Jr., and G. D. Bennett. 1963. 60 p. (reprint of U.S. Geological Survey Water-Supply Paper 1544-D)	*
W 20	The ground-water observation-well program in Pennsylvania , C. W. Poth. 2nd ed., 1972. 18 p.	1.00 (OC) 2.05 (M)
W 21	Hydrology of the New Oxford Formation in Adams and York Counties, Pennsylvania , P. R. Wood and H. E. Johnston. 1964. 66 p., 1 pl., geol. map, scale approx. 1:62,500	2.50 (OC) 4.45 (M)
W 22	Ground-water resources of the Brunswick Formation in Montgomery and Berks Counties, Pennsylvania , S. M. Longwill and C. R. Wood. 1965. 59 p., 1 pl., geol. map, scale 1:62,500	*
W 23	Hydrology of the New Oxford Formation in Lancaster County, Pennsylvania , H. E. Johnston. 1966. 80 p., 1 pl., geol. map, scale 1:62,500	1.70 (OC) 2.95 (M)
W 24	Geology and hydrology of the Martinsburg Formation in Dauphin County, Pennsylvania , L. D. Carswell, J. R. Hollowell, and L. B. Platt. 1968. 54 p., 1 pl., geol. map, scale 1:24,000	2.65 (OC) 3.90 (M)
W 25	Hydrology of the metamorphic and igneous rocks of central Chester County, Pennsylvania , C. W. Poth. 1968; 2nd printing, 1973. 84 p., 3 pls., geol. maps, scale 1:24,000	5.20 (OC) 6.45 (M)
W 26	Hydrogeology of the carbonate rocks of the Lancaster 15-minute quadrangle, southeastern Pennsylvania , Harold Meisler and A. E. Becher. 1971; 2nd printing, 1973. 149 p., 2 pls., geol. map, scale 1:24,000	6.80 (OC) 8.25 (M)
W 27	Ground-water resources of the Loysville and Mifflintown quadrangles in south-central Pennsylvania , H. E. Johnston. 1970; 2nd printing, 1973. 96 p., 2 pls., geol. maps, scale approx. 1:31,680 (1 in. = approx. 2,640 ft).....	3.85 (OC) 5.10 (M)
W 28	Hydrology of the Pleistocene sediments in the Wyoming Valley, Luzerne County, Pennsylvania , J. R. Hollowell. 1971; 2nd printing, 1973. 77 p., 4 pls., geol. map, scale 1:24,000.....	6.20 (OC) 8.45 (M)
W 29	Ground-water resources of Montgomery County, Pennsylvania , T. G. Newport. 1971; 2nd printing, 1973. 83 p., 2 pls.	*
W 30	Hydrology of the Martinsburg Formation in Lehigh and Northampton Counties, Pennsylvania , C. W. Poth. 1972. 52 p., 1 pl., geol. map, scale approx. 1:62,500	3.00 (OC) 4.55 (M)
W 31	Water resources of Lehigh County, Pennsylvania , C. R. Wood, H. N. Flippo, Jr., J. B. Lescinsky, and J. L. Barker. 1972. 263 p., 5 pls., geol. maps, scales 1:62,500 and 1:24,000.....	10.50 (OC) 12.05 (M)
W 32	Summary ground-water resources of Clarion County, Pennsylvania , T. G. Newport. 1973. 42 p., 1 pl., geol. map, scale 1:125,000	2.50 (OC) 3.75 (M)
W 33	Geology and ground-water resources of northern Mercer County, Pennsylvania , G. R. Schiner and G. E. Kimmel. 1976. 136 p., 2 pls., geol. maps, scale 1:24,000.....	20.15 (OC) 22.30 (M)
W 34	Summary ground-water resources of Armstrong County, Pennsylvania , C. W. Poth. 1973. 38 p., 1 pl., geol. map, scale 1:125,000	2.20 (OC) 3.55 (M)

W 35	Summary ground-water resources of Allegheny County, Pennsylvania, J. T. Gallaher. 1973. 71 p., 1 pl., geol. map, scale 1:125,000.....	*
W 36	Summary ground-water resources of Butler County, Pennsylvania, C. W. Poth. 1973. 49 p., 1 pl., geol. map, scale 1:125,000.....	2.20 (OC) 3.55 (M)
W 37	Summary ground-water resources of Westmoreland County, Pennsylvania, T. G. Newport. 1973. 49 p., 1 pl., geol. map, scale 1:125,000.....	2.20 (OC) 3.55 (M)
W 38	Summary ground-water resources of Washington County, Pennsylvania, T. G. Newport. 1973. 32 p., 1 pl., geol. map, scale 1:125,000.....	2.20 (OC) 3.55 (M)
W 39	Summary ground-water resources of Beaver County, Pennsylvania, C. W. Poth. 1973. 39 p., 1 pl., geol. map, scale 1:125,000.....	2.20 (OC) 3.55 (M)
W 40	Summary ground-water resources of Luzerne County, Pennsylvania, T. G. Newport. 1977. 63 p., 1 pl., geol. map, scale 1:125,000	6.40 (OC) 7.65 (M)
W 41	Ground-water resources of Lackawanna County, Pennsylvania, J. R. Hollowell and H. E. Koester. 1975. 106 p., 3 pls., geol. map, scale 1:62,500	13.40 (OC) 15.00 (M)
W 42	Ground-water resources of central and southern York County, Pennsylvania, O. B. Lloyd, Jr., and D. J. Growitz. 1977. 93 p., 2 pls., geol. map, scale 1:62,500.....	12.60 (OC) 14.20 (M)
W 43	Summary ground-water resources of Lancaster County, Pennsylvania, C. W. Poth. 1977. 80 p., 1 pl., geol. map, scale 1:125,000	*
W 44	Geology and groundwater resources of northern Berks County, Pennsylvania, C. R. Wood and D. B. MacLachlan. 1978; 2nd printing, 1992. 91 p., 2 pls., geol. map, scale 1:62,500	20.35 (OC) 22.10 (M)
W 45	Groundwater resources of the DuBois area, Clearfield and Jefferson Counties, Pennsylvania, E. T. Shuster. 1979. Scale 1:48,000, 2 pls., geol. map with short text	5.75 (OC) 7.35 (M)
W 46	Geology and groundwater resources of western Crawford County, Pennsylvania, G. R. Schiner and J. T. Gallaher. 1979. 103 p., 3 pls., geol. map, map showing thickness of glacial deposits, scale 1:50,000	14.40 (OC) 16.35 (M)
W 47	Geology and groundwater resources of Monroe County, Pennsylvania, L. D. Carswell and O. B. Lloyd, Jr. 1979. 61 p., 1 pl., geol. map, scale 1:48,000.....	7.50 (OC) 9.20 (M)
W 48	Summary groundwater resources of Centre County, Pennsylvania, C. R. Wood. 1980. 60 p., 1 pl., geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi)	10.10 (OC) 11.70 (M)
W 49	Groundwater resources of the Gettysburg and Hammer Creek Formations, southeastern Pennsylvania, C. R. Wood. 1980. 87 p., 2 pls., geol. maps, scale 1:50,000	11.00 (OC) 12.95 (M)
W 50	Groundwater and geology of the Cumberland Valley, Cumberland County, Pennsylvania, A. E. Becher and S. I. Root. 1981. 95 p., 3 pls., geol. map, scale 1:50,000	12.20 (OC) 14.00 (M)
W 51	Groundwater resources of the Williamsport region, Lycoming County, Pennsylvania, O. B. Lloyd, Jr., and L. D. Carswell. 1981. 69 p., 2 pls., geol. map, scale 1:50,000	9.80 (OC) 11.75 (M)
W 52	Summary groundwater resources of Adams County, Pennsylvania, L. E. Taylor and D. W. Royer. 1981. 50 p., 1 pl., geol. map, scale 1:50,000.....	12.30 (OC) 13.90 (M)
W 53	Groundwater resources in the Cumberland and contiguous valleys of Franklin County, Pennsylvania, A. E. Becher and L. E. Taylor. 1982. 67 p., 1 pl., geol. map, scale 1:50,000	8.50 (OC) 10.10 (M)
W 54	Groundwater resources of the Juniata River basin, Pennsylvania, L. E. Taylor, W. H. Werkheiser, N. S. duPont, and M. L. Kriz. 1982. 131 p., 1 pl., geol. map, scale 1:250,000.....	8.90 (OC) 10.15 (M)

W 55	Summary groundwater resources of Lebanon County, Pennsylvania , D. W. Royer. 1983. 84 p., 1 pl., geol. map, scale 1:50,000	13.70 (OC) 15.30 (M)
W 56	Groundwater resources of the West Branch Susquehanna River basin, Pennsylvania , L. E. Taylor, W. H. Werkheiser, and M. L. Kriz. 1983. 143 p., 1 pl., geol. map, scale 1:250,000	*
W 57	Groundwater resources of the Lower Susquehanna River basin, Pennsylvania , L. E. Taylor and W. H. Werkheiser. 1984; 2nd printing. 1986. 130 p., 1 pl., geol. map, scale 1:250,000	14.75 (OC) 16.65 (M)
W 58	Groundwater resources of the Upper Susquehanna River basin, Pennsylvania , L. E. Taylor. 1984; 2nd printing, 1992. 136 p., 1 pl., geol. map, scale 1:250,000.....	13.05 (OC) 14.90 (M)
W 59	Summary groundwater resources of Perry County, Pennsylvania , D. W. Royer. 1984. 70 p., 1 pl., geol. map, scale 1:50,000	14.50 (OC) 16.25 (M)
W 60	Groundwater resources of Fayette County, Pennsylvania , T. A. McElroy. 1988. 57 p., 2 pls., geol. map, scale 1:50,000	14.60 (OC) 16.20 (M)
W 61	Groundwater resources of the Berwick-Bloomsburg-Danville area, east-central Pennsylvania , J. H. Williams and D. A. Eckhardt. 1987. 76 p., 1 pl., geol. map, scale 1:50,000.....	9.40 (OC) 10.65 (M)
W 62	Groundwater resources of Erie County, Pennsylvania , D. B. Richards, H. J. McCoy, and J. T. Gallaher. 1987. 101 p., 2 pls., geol. map, scale 1:62,500.....	15.30 (OC) 16.90 (M)
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W 64	Groundwater resources in and near the anthracite basins of Schuylkill and adjacent counties, Pennsylvania , A. E. Becher. 1991. 59 p., 1 pl., geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi)	10.70 (OC) 12.00 (M)
W 65	Groundwater resources of Pike County, Pennsylvania , D. K. Davis. 1989. 63 p., 2 pls., bedrock geol. map, surficial geol. map, scale 1:50,000.....	16.50 (OC) 18.10 (M)
W 66	Geologic map of Delaware County, Pennsylvania, showing the locations of selected wells , W. T. Balmer and D. K. Davis. 1993. 1 pl., geol. map, scale 1:50,000.....	9.75‡
W 67	Geologic map of Cambria County, Pennsylvania, showing the locations of selected wells and springs , T. A. McElroy. 1993. 1 pl., geol. map, scale 1:50,000.....	8.20‡
W 68	Surficial geologic map of major glaciated valleys of Bradford, Tioga, and Potter Counties, Pennsylvania, showing locations of wells, test holes, and data-collection sites , J. H. Williams, L. E. Taylor, and D. J. Low. 1993. 1 pl. on 2 sheets, surficial geol. map, scale 1:100,000 (1 in. = approx. 1.6 mi).....	9.60‡

SELECTED PUBLICATIONS

Pennsylvania geology. A quarterly (originally bimonthly) publication issued by the Bureau of Topographic and Geologic Survey. Generally 16 p., illustrated in two colors. Series begins with v. 1, no. 1, August 1969

free

Pennsylvania. Excerpts from U.S. Bureau of Mines Minerals Yearbook. Generally 8–12 p. Annual publication on nonfuel mineral production in Pennsylvania for the years 1988–91

free

**PENNSYLVANIA TOPOGRAPHIC AND
GEOLOGIC SURVEY COMMISSION
(Third Survey)**

SELECTED PUBLICATIONS

ECONOMIC REPORTS

1	Geology of the oil and gas fields in Sewickley quadrangle , M. J. Munn. 1910. 171 p., 10 pls.	*
2	Geologic map of southwestern Pennsylvania . 1914. 29 p., 10 pls.	*
3	Geology of the oil and gas fields of the Clarion quadrangle , M. J. Munn. 1910. 111 p., 9 pls.	*
4	The mineral pigments of Pennsylvania , B. L. Miller. 1911. 101 p., 29 pls.	*
5	Preliminary report on the talc and serpentine of Northampton County and the portland cement materials of the Lehigh district , F. B. Peck. 1911. 65 p., 17 pls.	*
6	Graphite deposits of Pennsylvania , B. L. Miller. 1912. 147 p., 17 pls.	*
7	Engineering data . 1913. 450 p., 3 pls.	*
8	The mineral production of Pennsylvania, 1911 , R. R. Hice. 1911.	
Pt. A	Coal and coke . 139 p.	*
Pt. C	Clay and clay products . 51 p.	*
Pt. E	Quarry products, granite, trap rock, sandstone, blue stone, marble, limestone, lime . 84 p.	*
9	Minerals of Pennsylvania , A. P. Brown and Frederick Ehrenfeld. 1913. 160 p., 10 pls.	*
10	The Broad-Top coal field of Huntingdon, Bedford and Fulton Counties , J. H. Gardner. 1913. 81 p., 32 pls.	*
11	The mineral production of Pennsylvania for the year 1913 . 1915. 108 p. .	*
12	Glass manufacture and the glass sand industry of Pennsylvania , C. R. Fettke. 1919. 278 p., 108 pls.	*

BIENNIAL REPORTS

(Reports contain mineral resource data.)

Report of Topographic and Geologic Survey Commission of Pennsyl- vania, 1910-1912 . 1912. 182 p., 21 pls.	*
Report of Topographic and Geologic Survey Commission of Pennsylvania, 1913-1914 . 1914. 232 p., 5 pls.	*

KEY TO QUADRANGLE NUMBERING SYSTEM



QUADRANGLE INDEX

The following list is to be used in conjunction with the index map above. The names of 15-minute quadrangles correspond to the numbered headings, and the associated 7.5-minute quadrangles correspond to the lettered headings. The index begins with the 15-minute quadrangle located in the upper left corner of the map.

- | | | | |
|---------------------|---------------------|-------------------------|-------------------|
| 1. Girard | 5. New Castle | 9. Rogersville | 13. Stoneboro |
| a. East Springfield | a. Bessemer | a. Wind Ridge | a. Hadley |
| b. Albion | b. New Castle South | b. Rogersville | b. New Lebanon |
| c. Beaver Center | c. New Galilee | c. New Freeport | c. Jackson Center |
| d. Conneautville | d. Beaver Falls | d. Holbrook | d. Sandy Lake |
| 2. Linesville | 6. Beaver | 10. Erie | 14. Mercer |
| a. Linesville | a. Midland | a-b. Erie North | a. Mercer |
| b. Harmonsburg | b. Beaver | c. Swanville | b. Grove City |
| c. Hartstown | c. Hookstown | d. Erie South | c. Harlansburg |
| d. Conneaut Lake | d. Aliquippa | | d. Slippery Rock |
| 3. Shenango | 7. Burgettstown | 11. Cambridge Springs | 15. Zelienople |
| a. Greenville West | a. Burgettstown | a. Edinboro North | a. Portersville |
| b. Greenville East | b. Clinton | b. Cambridge Springs NE | b. Prospect |
| c. Sharpsville | c. Avella | c. Edinboro South | c. Zelienople |
| d. Fredonia | d. Midway | d. Cambridge Springs | d. Evans City |
| 4. Neshannock | 8. Claysville | 12. Meadville | 16. Sewickley |
| a. Sharon East | a. West Middletown | a. Meadville | a. Baden |
| b. Greenfield | b. Washington West | b. Blooming Valley | b. Mars |
| c. Edinburg | c. Claysville | c. Geneva | c. Ambridge |
| d. New Castle North | d. Prosperity | d. Cochranton | d. Emsworth |

17. Carnegie
a. Oakdale
b. Pittsburgh West
c. Canonsburg
d. Bridgeville
18. Amity
a. Washington East
b. Hackett
c. Amity
d. Ellsworth
19. Waynesburg
a. Waynesburg
b. Mather
c. Oak Forest
d. Garards Fort
20. North East
a. Harborcreek
b. North East
c. Hammett
d. Wattsburg
21. Union City
a. Waterford
b. Union City
c. Millers Station
d. Lake Canadohta
22. Townville
a. Townville
b. Centerville
c. Sugar Lake
d. Dempseytown
23. Franklin
a. Utica
b. Franklin
c. Polk
d. Kennerdell
24. Hilliards
a. Barkeyville
b. Eau Claire
c. West Sunbury
d. Hilliards
25. Butler
a. Mount Chestnut
b. East Butler
c. Butler
d. Saxonburg
26. New Kensington
a. Valencia
b. Curtisville
c. Glenshaw
d. New Kensington West
27. Pittsburgh
a. Pittsburgh East
b. Braddock
c. Glassport
d. McKeesport
28. Brownsville
a. Monongahela
b. Donora
c. California
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29. Masontown
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b. New Salem
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d. Smithfield
31. Corry
a. Corry
b. Columbus
c. Spartansburg
d. Spring Creek
32. Titusville
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b. Grand Valley
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33. Oil City
a. Oil City
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c. Cranberry
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34. Foxburg
a. Emlenton
b. Knox
c. Parker
d. Rimersburg
35. Kittanning
a. Chicora
b. East Brady
c. Worthington
d. Kittanning
36. Freeport
a. Freeport
b. Leechburg
c. New Kensington
East
d. Vandergrift
37. Greensburg
a. Murrysville
b. Slickville
c. Irwin
d. Greensburg
38. Connellsville
a. Smithton
b. Mount Pleasant
c. Dawson
d. Connellsville
39. Uniontown
a. Uniontown
b. South Connellsville
c. Brownfield
d. Fort Necessity
41. Youngsville
a. Lottsville
b. Sugar Grove
c. Pittsfield
d. Youngsville
42. Tidioute
a. Tidioute
b. Cobham
c. West Hickory
d. Kellettville
43. Tionesta
a. Tionesta
b. Tylersburg
c. Fryburg
d. Lucinda
44. Clarion
a. Clarion
b. Strattanville
c. Sligo
d. New Bethlehem
45. Rural Valley
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b. Distant
c. Mosgrove
d. Rural Valley
46. Elders Ridge
a. Whitesburg
b. Elderton
c. Avonmore
d. McIntyre
47. Latrobe
a. Saltsburg
b. Blairsville
c. Latrobe
d. Derry
48. Donegal
a. Mammoth
b. Stahlstown
c. Donegal
d. Seven Springs
49. Confluence
a. Mill Run
b. Kingwood
c. Ohiopyle
d. Confluence
51. Warren
a. Russell
b. Scandia
c. Warren
d. Clarendon
52. Sheffield
a. Cherry Grove
b. Sheffield
c. Mayburg
d. Lynch
53. Marienville
a. Marienville West
b. Marienville East
c. Cooksburg
d. Sigel
54. Brookville
a. Corsica
b. Brookville
c. Summerville
d. Coolspring
55. Smicksburg
a. Dayton
b. Valier
c. Plumville
d. Marion Center
56. Indiana
a. Ernest
b. Clymer
c. Indiana
d. Brush Valley
57. New Florence
a. Bolivar
b. New Florence
c. Wilpen
d. Rachelwood
58. Somerset
a. Ligonier
b. Boswell
c. Bakersville
d. Somerset
59. Meyersdale
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b. Murdock
c. Markleton
d. Meyersdale
61. Kinzua
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b. Stickney
c. Complanter Bridge
d. Westline
62. Kane
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b. Kane
c. Russell City
d. James City
63. Hallton
a. Hallton
b. Portland Mills
c. Munderf
d. Carman
64. Du Bois
a. Hazen
b. Falls Creek
c. Reynoldsville
d. Du Bois
65. Punxsutawney
a. Punxsutawney
b. McGees Mills
c. Rochester Mills
d. Burnside
66. Barnesboro
a. Commodore
b. Barnesboro
c. Strongtown
d. Colver
67. Johnstown
a. Vintondale
b. Nanty Glo
c. Johnstown
d. Geistown
68. Windber
a. Hooversville
b. Windber
c. Stoystown
d. Central City
69. Berlin
a. Berlin
b. New Baltimore
c. Wittenberg
d. Fairhope
71. Bradford
a. Bradford
b. Derrick City
c. Lewis Run
d. Cyclone
72. Mt. Jewett
a. Mt. Jewett
b. Hazel Hurst
c. Wilcox
d. Glen Hazel
73. Ridgway
a. Ridgway
b. Saint Marys
c. Brandy Camp
d. Kersey

74. Penfield
 a. Sabula
 b. Penfield
 c. Luthersburg
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75. Curwensville
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 b. Curwensville
 c. Westover
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76. Patton
 a. Hastings
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 d. Ashville
77. Ebensburg
 a. Ebensburg
 b. Cresson
 c. Beaverdale
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78. Bedford
 a. Ogletown
 b. Alum Bank
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79. Hyndman
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 b. Rainsburg
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81. Smethport
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 b. Bullis Mills
 c. Smethport
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 c. Ramey
 d. Houtzdale
86. Altoona
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 b. Tipton
 c. Altoona
 d. Bellwood
87. Hollidaysburg
 a. Hollidaysburg
 b. Frankstown
 c. Roaring Spring
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88. Everett
 a. New Enterprise
 b. Hopewell
 c. Everett West
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Much additional information on Pennsylvania geology is available in publications not covered in this list. The reader is referred to Pennsylvania Geological Survey General Geology Reports 34, 42, 61, and 73 for a more comprehensive list of articles on Pennsylvania geology written before 1979.

Abbreviations used in this index are as follows:

Pennsylvania Third (Commission) Survey—Pa. Geol. Survey (3rd)

Pennsylvania Geological Survey, fourth series—Pa. Geol. Survey (4th)

A — Atlas Series	Map — Map
C — County Report	OF — Open-File Report
EG — Environmental Geology Report	PG — Park Guide
ES — Educational Series	PR — Progress Report
G — General Geology Report	SB — Special Bulletin
IC — Information Circular	W — Water Resource Report
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